AMENDMENTS TO THE CLAIMS

Claims 1-180 were pending at the time of the Office Action.

Claims 1, 19-20, 36, 37, 45-49, 67, 84, 85, 93-95, 108, 110, 112-113, 129, 159, 179, and 180 are hereby amended. Claims 1-180 remain pending.

1. (Currently Amended) A method comprising:

creating a plurality of ~~one or more~~ first-administered content indexes for a first set of motes;

aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes;

creating one or more second-administered content indexes for a second set of motes;

obtaining at least a part of the second-administered content indexes of the second set of motes; and

creating a federated index from the aggregated content index aggregated by the gateway mote ~~at least a part of the one or more first-administered content indexes~~ and at least a part of the one or more second-administered content indexes.

2. (Original) The method of claim 1, wherein said creating one or more first-administered content indexes for a first set of motes further comprises:

aggregating at least a part of one or more mote-addressed content indexes from the first set of motes.

3. (Original) The method of claim 2, wherein said aggregating at least a part of one or more mote-addressed content indexes from the first set of motes further comprises:

receiving at least a part of one or more mote-addressed indexes of the first set of motes.

4. (Original) The method of claim 2, wherein said aggregating at least a part of one or more mote-addressed content indexes from the first set of motes further comprises:

creating one or more multi-mote content indexes of the first set of motes.

5. (Original) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes.

6. (Original) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes from a multi-mote registry.

7. (Original) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

obtaining a pre-loaded listing of motes appropriate to at least one of the one or more multi-mote content indexes.

8. (Previously Presented) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes from one or more motes to be included in the listing.

9. (Original) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the first set of motes.

10. (Original) The method of claim 4, wherein said creating one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed routing/spatial index from a reporting entity at a mote of the first set of motes.

11. (Original) The method of claim 2, wherein said aggregating at least a part of one or more mote-addressed content indexes from the first set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the first set of motes.

12. (Original) The method of claim 11, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more first-administered indexes.

13. (Original) The method of claim 11, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more first-administered indexes.

14. (Original) The method of claim 11, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the first set of motes.

15. (Original) The method of claim 11, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the first set of motes.

16. (Original) The method of claim 2, wherein said aggregating at least a part of one or more mote-addressed content indexes from the first set of motes further comprises:

creating an aggregate of at least a part of one or more multi-mote content indexes of the first set of motes.

17. (Original) The method of claim 16, wherein said creating an aggregate of at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

aggregating at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of a multi-mote content index.

18. (Original) The method of claim 16, wherein said creating an aggregate of at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

aggregating at least a part of a mote-addressed routing/spatial index of a multi-mote content index.

19. (Currently Amended) The method of claim 2, wherein said aggregating at least a part of one or more mote-addressed content indexes from the first set of motes further comprises:

migrating to a mote of the first set of motes;

installing a multi-mote index creation agent at the mote; and

receiving at least a part of one or more mote-addressed content indexes with the multi-mote index creation agent ~~unit~~.

20. (Currently Amended) The method of claim 1, wherein said aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the first set of motes.

21. (Original) The method of claim 20, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more first-administered indexes.

22. (Original) The method of claim 20, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more first-administered indexes.

23. (Original) The method of claim 20, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the first set of motes.

24. (Original) The method of claim 20, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the first set of motes.

25. (Original) The method of claim 1, wherein said creating one or more first-administered content indexes for a first set of motes further comprises:

determining at least one of a sensing function or a control function at a mote; and

creating one or more mote-addressed content indexes in response to said determining.

26. (Original) The method of claim 25, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

accessing at least one device entity registry.

27. (Original) The method of claim 25, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

communicating with at least one device-associated entity.

28. (Original) The method of claim 27, wherein said communicating with at least one device-associated entity further comprises:

communicating with at least one of a light device entity, an electrical device entity, a pressure device entity, a temperature device entity, a volume device entity, an inertial device entity, or an antenna entity.

29. (Original) The method of claim 27, wherein said communicating with at least one device-associated entity further comprises:

accessing at least one device identifier of a mote-addressed content index.

30. (Original) The method of claim 25, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

communicating with at least one device entity using a common application protocol.

31. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one extensible index.

32. (Original) The method of claim 31, wherein said creating at least one extensible index further comprises:

creating the at least one extensible index in response to a type of content indexed.

33. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one of a mote-addressed sensing index or a mote-addressed control index.

34. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one of a mote-addressed routing/spatial index.

35. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

inserting at least one device identifier in the one or more mote-addressed content indexes.

36. (Currently Amended) The method of claim 1 ~~25~~, wherein said creating one or more mote-addressed content indexes ~~in response to said determining further~~ comprises:

establishing an index-creating agent at a first gateway mote of the first set of motes;

determining a mote-network address of the first gateway mote; and

associating at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index with the mote-network address of the first gateway mote.

37. (Currently Amended) The method of claim 1 ~~25~~, wherein said creating one or more mote-addressed content indexes ~~in response to said determining further~~ comprises:

migrating to a first gateway mote of the first set of motes;

installing an index creation agent at the first gateway mote; and

querying at least one device entity with the index creation agent.

38. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the first set of motes;

determining one or more types of control available from one or more devices of the mote; and

associating the one or more types of control available from one or more devices of the mote with the mote-network address of the mote.

39. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the first set of motes;

determining one or more types of sensing available from one or more devices of the mote; and

associating the one or more types of sensing available from one or more devices of the mote with the mote-network address of the mote.

40. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the first set of motes;

determining one or more types of spatial information related to devices of or proximate to the mote; and

associating the one or more types of spatial information related to devices of or proximate to the mote with the mote-network address of the mote.

41. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the first set of motes;

determining one or more types of absolute or relative spatial information of other motes proximate to the mote; and

associating the one or more types of absolute or relative spatial information of other motes proximate to the mote with the mote-network address of the mote.

42. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with the one or more mote-addressed content indexes.

43. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with at least one directly mote-addressed content index.

44. (Original) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with at least one indirectly mote-addressed content index.

45. (Currently Amended) The method of claim 25, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

selecting from one or more predetermined ~~established standards or~~ protocols.

46. (Currently Amended) The method of claim 45, wherein said selecting from one or more predetermined ~~established standards or~~ protocols further comprises:

publishing at least a part of an identifier of the selected predetermined ~~established standards or~~ protocol.

47. (Currently Amended) The method of claim 45, wherein said selecting from one or more predetermined ~~established standards or~~ protocols further comprises:

encryption utilizing at least one of a private and a public key.

48. (Currently Amended) The method of claim 1, wherein said aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the first set of motes.

49. (Currently Amended) The method of claim 1, wherein said aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the first set of motes.

50. (Original) The method of claim 1, wherein said creating one or more second-administered content indexes for a second set of motes further comprises:

aggregating at least a part of one or more mote-addressed content indexes from the second set of motes.

51. (Original) The method of claim 50, wherein said aggregating at least a part of one or more mote-addressed content indexes from the second set of motes further comprises:

receiving at least a part of one or more mote-addressed indexes of the second set of motes.

52. (Original) The method of claim 50, wherein said aggregating at least a part of one or more mote-addressed content indexes from the second set of motes further comprises:

creating one or more multi-mote content indexes of the second set of motes.

53. (Original) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes.

54. (Original) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes from a multi-mote registry.

55. (Original) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

obtaining a pre-loaded listing of motes appropriate to at least one of the one or more multi-mote content indexes.

56. (Previously Presented) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

obtaining a listing of motes appropriate to at least one of the one or more multi-mote content indexes from one or more motes to be included in the listing.

57. (Original) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the second set of motes.

58. (Original) The method of claim 52, wherein said creating one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed routing/spatial index from a reporting entity at a mote of the second set of motes.

59. (Original) The method of claim 50, wherein said aggregating at least a part of one or more mote-addressed content indexes from the second set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the second set of motes.

60. (Original) The method of claim 59, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more second-administered indexes.

61. (Original) The method of claim 59, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more second-administered indexes.

62. (Original) The method of claim 59, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the second set of motes.

63. (Original) The method of claim 59, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the second set of motes.

64. (Original) The method of claim 50, wherein said aggregating at least a part of one or more mote-addressed content indexes from the second set of motes further comprises:

creating an aggregate of at least a part of one or more multi-mote content indexes of the second set of motes.

65. (Original) The method of claim 64, wherein said creating an aggregate of at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

aggregating at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of a multi-mote content index.

66. (Original) The method of claim 64, wherein said creating an aggregate of at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

aggregating at least a part of a mote-addressed routing/spatial index of a multi-mote content index.

67. (Currently Amended) The method of claim 50, wherein said aggregating at least a part of one or more mote-addressed content indexes from the second set of motes further comprises:

migrating to a mote of the second set of motes;

installing a multi-mote index creation agent at the mote; and

receiving at least a part of one or more mote-addressed content indexes with the multi-mote index creation agent ~~unit~~.

68. (Original) The method of claim 1, wherein said obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the second set of motes.

69. (Original) The method of claim 68, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more second-administered indexes.

70. (Original) The method of claim 68, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more second-administered indexes.

71. (Original) The method of claim 68, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the second set of motes.

72. (Original) The method of claim 68, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the second set of motes.

73. (Original) The method of claim 1, wherein said creating one or more second-administered content indexes for a second set of motes further comprises:

determining at least one of a sensing function or a control function at a mote; and

creating one or more mote-addressed content indexes in response to said determining.

74. (Original) The method of claim 73, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

accessing at least one device entity registry.

75. (Original) The method of claim 73, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

communicating with at least one device-associated entity.

76. (Original) The method of claim 75, wherein said communicating with at least one device-associated entity further comprises:

communicating with at least one of a light device entity, an electrical device entity, a pressure device entity, a temperature device entity, a volume device entity, an inertial device entity, or an antenna entity.

77. (Original) The method of claim 75, wherein said communicating with at least one device-associated entity further comprises:

accessing at least one device identifier of a mote-addressed content index.

78. (Original) The method of claim 73, wherein said determining at least one of a sensing function or a control function at a mote further comprises:

communicating with at least one device entity using a common application protocol.

79. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one extensible index.

80. (Original) The method of claim 79, wherein said creating at least one extensible index further comprises:

creating the at least one extensible index in response to a type of content indexed.

81. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one of a mote-addressed sensing index or a mote-addressed control index.

82. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

creating at least one of a mote-addressed routing/spatial index.

83. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

inserting at least one device identifier in the one or more mote-addressed content indexes.

84. (Currently Amended) The method of claim 36 ~~73~~, wherein said creating one or more mote-addressed content indexes ~~in response to said determining~~ further comprises:

establishing an index-creating agent at a second gateway mote of the second set of motes;

determining a mote-network address of the second gateway mote; and

associating at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index with the mote-network address of the second gateway mote.

85. (Currently Amended) The method of claim 37 ~~73~~, wherein said creating one or more mote-addressed content indexes ~~in response to said determining~~ further comprises:

migrating to a second gateway mote of the second set of motes;

installing an index creation agent at the second gateway mote; and

querying at least one device entity with the index creation agent.

86. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the second set of motes;

determining one or more types of control available from one or more devices of the mote; and

associating the one or more types of control available from one or more devices of the mote with the mote-network address of the mote.

87. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the second set of motes;

determining one or more types of sensing available from one or more devices of the mote; and

associating the one or more types of sensing available from one or more devices of the mote with the mote-network address of the mote.

88. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the second set of motes;

determining one or more types of spatial information related to devices of or proximate to the mote; and

associating the one or more types of spatial information related to devices of or proximate to the mote with the mote-network address of the mote.

89. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

determining a mote-network address of a mote of the second set of motes;

determining one or more types of absolute or relative spatial information of other motes proximate to the mote; and

associating the one or more types of absolute or relative spatial information of other motes proximate to the mote with the mote-network address of the mote.

90. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with the one or more mote-addressed content indexes.

91. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with at least one directly mote-addressed content index.

92. (Original) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

associating one or more mote-appropriate routing addresses with at least one indirectly mote-addressed content index.

93. (Currently Amended) The method of claim 73, wherein said creating one or more mote-addressed content indexes in response to said determining further comprises:

selecting from one or more predetermined ~~established standards or~~ protocols.

94. (Currently Amended) The method of claim 93, wherein said selecting from one or more predetermined ~~established standards or~~ protocols further comprises:

publishing at least a part of an identifier of the selected established standard or protocol.

95. (Currently Amended) The method of claim 93, wherein said predetermined ~~established standards or~~ protocols further comprises:

encryption utilizing at least one of a private and a public key.

96. (Original) The method of claim 1, wherein said obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the second set of motes.

97. (Original) The method of claim 1, wherein said obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the second set of motes.

98. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

creating the federated index from at least a part of one or more multi-mote content indexes of the first set of motes.

99. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the first set of motes.

100. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

creating the federated index from at least a part of one or more multi-mote content indexes of the second set of motes.

101. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the second set of motes.

102. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have one or more entries noting one or more respective administrative domains of one or more content index entries.

103. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have access information to one or more content indexes for an administered content index.

104. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have information pertaining to a currency of at least one entry of an administered content index.

105. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have information pertaining to an expiration of at least one entry of an administered content index.

106. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have metadata pertaining to an administrative domain, wherein the metadata includes at least one of an ownership indicator, an access right indicator, an index refresh indicator, or a predefined policy indicator.

107. (Original) The method of claim 1, wherein said creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

generating the federated index to have an administrative domain-specific query string generated for or supplied by an administrative domain to produce an updated content index for that domain.

108. (Currently Amended) A system comprising:

means for creating a plurality of ~~one or more~~ first-administered content indexes for a first set of motes;

means for aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes;

means for creating one or more second-administered content indexes for a second set of motes;

means for obtaining at least a part of the second-administered content indexes of the second set of motes; and

means for creating a federated index from the aggregated content index aggregated by the gateway mote ~~at least a part of the one or more first-administered content indexes~~ and at least a part of the one or more second-administered content indexes, wherein at least one of the means for creating or the means for obtaining includes at least one of electrical circuitry for creating or electrical circuitry for obtaining.

109. (Original) The system of claim 108, wherein said means for creating one or more first-administered content indexes for a first set of motes further comprises:

means for aggregating at least a part of one or more mote-addressed content indexes from the first set of motes.

110. (Currently Amended) The system of claim 108, wherein said means for aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

means for receiving at least a part of one or more multi-mote content indexes of the first set of motes.

111. (Original) The system of claim 108, wherein said means for creating one or more first-administered content indexes for a first set of motes further comprises:

means for determining at least one of a sensing function or a control function at a mote; and

means for creating one or more mote-addressed content indexes in response to said means for determining.

112. (Currently Amended) The system of claim 108, wherein said means for aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the first set of motes.

113. (Currently Amended) The system of claim 108, wherein said means for aggregating the plurality of ~~obtaining at least a part of the one or more~~ first-administered content indexes of the first set of motes into an aggregated content index using a gateway mote included within the first set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the first set of motes.

114. (Original) The system of claim 108, wherein said means for creating one or more second-administered content indexes for a second set of motes further comprises:

means for aggregating at least a part of one or more mote-addressed content indexes from the second set of motes.

115. (Original) The system of claim 108, wherein said means for obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

means for receiving at least a part of one or more multi-mote content indexes of the second set of motes.

116. (Original) The system of claim 108, wherein said means for creating one or more second-administered content indexes for a second set of motes further comprises:

means for determining at least one of a sensing function or a control function at a mote; and means for creating one or more mote-addressed content indexes in response to said means for determining.

117. (Original) The system of claim 108, wherein said means for obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the second set of motes.

118. (Original) The system of claim 108, wherein said means for obtaining at least a part of the second-administered content indexes of the second set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the second set of motes.

119. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for creating the federated index from at least a part of one or more multi-mote content indexes of the first set of motes.

120. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the first set of motes.

121. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for creating the federated index from at least a part of one or more multi-mote content indexes of the second set of motes.

122. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the second set of motes.

123. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have one or more entries noting one or more respective administrative domains of one or more content index entries.

124. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have access information to one or more content indexes for an administered content index.

125. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have information pertaining to a currency of at least one entry of an administered content index.

126. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have information pertaining to an expiration of at least one entry of an administered content index.

127. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have metadata pertaining to an administrative domain, wherein the metadata includes at least one of an ownership indicator, an access right indicator, an index refresh indicator, or a predefined policy indicator.

128. (Original) The system of claim 108, wherein said means for creating a federated index from at least a part of the one or more first-administered content indexes and at least a part of the one or more second-administered content indexes further comprises:

means for generating the federated index to have an administrative domain-specific query string generated for or supplied by an administrative domain to produce an updated content index for that domain.

129. (Currently Amended) A method comprising:

aggregating a plurality of ~~obtaining at least a part of a~~ first-administered content indexes ~~index~~ from a first set of motes into an aggregated content index using an aggregating mote from among the first set of motes;

obtaining at least a part of a second-administered content index from a second set of motes; and

creating a federated index from ~~at least a part of~~ the aggregated ~~first-administered~~ content index from the aggregating mote and at least a part of the second-administered content index.

130. (Original) The method of claim 129, wherein said obtaining at least a part of a first-administered content index from a first set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the first set of motes.

131. (Original) The method of claim 130, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more first-administered indexes.

132. (Original) The method of claim 130, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more first-administered indexes.

133. (Original) The method of claim 130, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the first set of motes.

134. (Original) The method of claim 130, wherein said receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the first set of motes.

135. (Original) The method of claim 129, wherein said obtaining at least a part of a first-administered content index from a first set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the first set of motes.

136. (Original) The method of claim 129, wherein said obtaining at least a part of a first-administered content index from a first set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the first set of motes.

137. (Original) The method of claim 129, wherein said obtaining at least a part of a second-administered content index from a second set of motes further comprises:

receiving at least a part of one or more multi-mote content indexes of the second set of motes.

138. (Original) The method of claim 137, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more second-administered indexes.

139. (Original) The method of claim 137, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more second-administered indexes.

140. (Original) The method of claim 137, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the second set of motes.

141. (Original) The method of claim 137, wherein said receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the second set of motes.

142. (Original) The method of claim 129, wherein said obtaining at least a part of a second-administered content index from a second set of motes further comprises:

receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the second set of motes.

143. (Original) The method of claim 129, wherein said obtaining at least a part of a second-administered content index from a second set of motes further comprises:

receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the second set of motes.

144. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

creating the federated index from at least a part of one or more multi-mote content indexes of the first set of motes.

145. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the first set of motes.

146. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

creating the federated index from at least a part of one or more multi-mote content indexes of the second set of motes.

147. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the second set of motes.

148. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have one or more entries noting one or more respective administrative domains of one or more content index entries.

149. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have access information to one or more content indexes for an administered content index.

150. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have information pertaining to a currency of at least one entry of an administered content index.

151. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have information pertaining to an expiration of at least one entry of an administered content index.

152. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have metadata pertaining to an administrative domain, wherein the metadata includes at least one of an ownership indicator, an access right indicator, an index refresh indicator, or a predefined policy indicator.

153. (Original) The method of claim 129, wherein said creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

generating the federated index to have an administrative domain-specific query string generated for or supplied by an administrative domain to produce an updated content index for that domain.

154. (Currently Amended) A system comprising:

means for aggregating a plurality ~~obtaining at least a part~~ of a first-administered content index from a first set of motes into an aggregated content index using an aggregating mote from among the first set of motes;

means for receiving ~~obtaining~~ at least a part of a second-administered content index from a second set of motes; and

means for creating a federated index from the aggregated ~~at least a part of the first-administered~~ content index from the aggregating mote and at least a part of the second-administered content index, wherein at least one of the means for obtaining or the means for creating includes at least one of electrical circuitry for obtaining or electrical circuitry for creating.

155. (Original) The system of claim 154, wherein said means for obtaining at least a part of a first-administered content index from a first set of motes further comprises:

means for receiving at least a part of one or more multi-mote content indexes of the first set of motes.

156. (Original) The system of claim 155, wherein said means for receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more first-administered indexes.

157. (Original) The system of claim 155, wherein said means for receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more first-administered indexes.

158. (Original) The system of claim 155, wherein said means for receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the first set of motes.

159. (Original) The system of claim 155, wherein said means for receiving at least a part of one or more multi-mote content indexes of the first set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the first set of motes.

160. (Original) The system of claim 154, wherein said means for obtaining at least a part of a first-administered content index from a first set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the first set of motes.

161. (Original) The system of claim 154, wherein said means for obtaining at least a part of a first-administered content index from a first set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the first set of motes.

162. (Original) The system of claim 154, wherein said means for obtaining at least a part of a second-administered content index from a second set of motes further comprises:

means for receiving at least a part of one or more multi-mote content indexes of the second set of motes.

163. (Original) The system of claim 162, wherein said means for receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from at least one aggregation of one or more second-administered indexes.

164. (Original) The system of claim 162, wherein said means for receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from at least one aggregation of one or more second-administered indexes.

165. (Original) The system of claim 162, wherein said means for receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a multi-mote reporting entity at a mote of the second set of motes.

166. (Original) The system of claim 162, wherein said means for receiving at least a part of one or more multi-mote content indexes of the second set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a multi-mote reporting entity at a mote of the second set of motes.

167. (Original) The system of claim 154, wherein said means for obtaining at least a part of a second-administered content index from a second set of motes further comprises:

means for receiving at least a part of at least one of a mote-addressed sensing index or a mote-addressed control index from a reporting entity at a mote of the second set of motes.

168. (Original) The system of claim 154, wherein said means for obtaining at least a part of a second-administered content index from a second set of motes further comprises:

means for receiving at least a part of a mote-addressed routing/spatial index from a reporting entity at a mote of the second set of motes.

169. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for creating the federated index from at least a part of one or more multi-mote content indexes of the first set of motes.

170. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the first set of motes.

171. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for creating the federated index from at least a part of one or more multi-mote content indexes of the second set of motes.

172. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for creating the federated index from at least a part of at least one of a mote-addressed sensing index, a mote-addressed control index, or a mote-addressed routing/spatial index of the second set of motes.

173. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have one or more entries noting one or more respective administrative domains of one or more content index entries.

174. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have access information to one or more content indexes for an administered content index.

175. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have information pertaining to a currency of at least one entry of an administered content index.

176. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have information pertaining to an expiration of at least one entry of an administered content index.

177. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have metadata pertaining to an administrative domain, wherein the metadata includes at least one of an ownership indicator, an access right indicator, an index refresh indicator, or a predefined policy indicator.

178. (Original) The system of claim 154, wherein said means for creating a federated index from at least a part of the first-administered content index and at least a part of the second-administered content index further comprises:

means for generating the federated index to have an administrative domain-specific query string generated for or supplied by an administrative domain to produce an updated content index for that domain.

179. (Currently Amended) A system comprising:

at least one computational system <u>having electrical circuitry and being</u> operably coupled with ~~at least one of~~ a first-administered set of motes <u>and</u> ~~or~~ a second-administered set of motes;

at least one gateway mote included within at least one of the first-administered set of motes or the second-administered set of motes, the at least one gateway mote including a multi-mote index creation agent configured to:

receive a plurality of content indexes from a corresponding plurality of motes of the at least one of the first-administered set of motes or the second-administered set of motes, and

aggregate the plurality of content indexes into at least one aggregated index associated with the at least one of the first-administered set of motes or the second-administered set of motes, respectively; and

at least one federated index creation agent resident in the computational system, said at least one federated index creation agent configured to receive the at least one aggregated index, and to create ~~at least a part of~~ a federated index that includes the at least one aggregated index.

180. (Currently Amended) A system comprising:

at least one computational system having electrical circuitry and being operably coupled with ~~at least one of~~ a first-administered set of motes and ~~or~~ a second-administered set of motes;

at least one gateway mote included within at least one of the first-administered set of motes or the second-administered set of motes, the at least one gateway mote including a multi-mote index creation agent configured to:

receive a plurality of content indexes from a corresponding plurality of motes of the at least one of the first-administered set of motes or the second-administered set of motes, and

aggregate the plurality of content indexes into at least one aggregated index associated with the at least one of the first-administered set of motes or the second-administered set of motes, respectively; and

at least one federated index resident in the computational system, said at least one at least one federated index configured to contain the at least one aggregated index ~~at least a part of at least one of a mote-addressed content index or a multi-mote content index~~.